CLAIMS

1. A process for decomposing a polymer into a monomer or oligomer by hydrolysis with sub- or supercritical water, characterized in that at least a part of the polymer is a polymer comprising a constitutional unit derived from an organic acid in the molecular structure, and the polymer being contacted with sub- or supercritical water in the presence of a water-insoluble base.

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- A process according to claim 1, wherein at least a
 part of the polymer is a polyester.
 - 3. A process according to claim 1, wherein the polymer is a polyester having no chlorine in the molecular structure.
 - 4. A process according to any one of claims 1 to 3, wherein the water-insoluble base has a solubility in the range of 1.0×10^{-4} to 0.5 g/100 g of water at 25°C.
 - 5. A process according to any one of claims 1 to 4, wherein the water-insoluble base is selected from a compound of a metal of group II.
- 6. A process according to claim 5, wherein the water20 insoluble base is selected from a Ca or Ba compound.
 - 7. A process according to claim 6, wherein the water-insoluble base is selected from $CaCO_3$, $BaCO_3$ and $Ca(OH)_2$.